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## NOTICE OF ALLOWANCE AND FEE(S) DUE

5514 7590 02/01/2010  
FITZPATRICK CELLA HARPER & SCINTO  
1290 Avenue of the Americas  
NEW YORK, NY 10104-3800

EXAMINER	
SHAH, PARAS D	
ART UNIT	PAPER NUMBER

2626  
DATE MAILED: 02/01/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,375	09/08/2003	Hiroki Kishi	03500.017558.	8246
TITLE OF INVENTION: IMAGE PROCESSING APPARATUS AND METHOD THEREOF				

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

5514 7590 02/01/2010

**FITZPATRICK CELLA HARPER & SCINTO**  
**1290 Avenue of the Americas**  
**NEW YORK, NY 10104-3800**

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,375

09/08/2003

Hirosi Kishi

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TITLE OF INVENTION: IMAGE PROCESSING APPARATUS AND METHOD THEREOF

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/03/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
SHAH, PARAS D	2626	704-500000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 814 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 814 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/656,375

**Applicant(s)**

KISHI, HIROKI

**Examiner**

PARAS SHAH

**Art Unit**

2626

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/12/2010.
2. ☒ The allowed claim(s) is/are 1, 6-10, 15-19, 21, and 22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This Office Action is in response to the Amendments and Arguments filed on 01/12/2010. Claims 1, 6-10,15-19, 21, and 22 remain pending and have been examined. The Applicants' amendment and remarks have been carefully considered, and in view of the amended claims are now in condition for allowance.

All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
3. Please **Replace** the **Title** with "High Quality Image and Audio Coding Apparatus and Method Depending on the ROI Setting."

### ***Reasons for Allowance***

4. Claims 1, 6-10,15-19, 21, and 22 allowed.
5. The following is an examiner's statement of reasons for allowance:
6. The closest prior art of record Maeda teaches an image and audio processing apparatus comprising: an input unit configured to input image data and audio data corresponding thereto (see Figure 24, MPEG-4 encoded data input unit 2401 and see

[0202], where image and audio data is associated with the data); image encoder configured to encode the image data (see page 4, [0080], line 19); audio encoder configured to encode the audio data (see page 12, [0204], line 1-3) for encoding audio data inputted together with the image data (see page 12, [0204], line 2); encoding of audio data during the period for which audio data (see Maeda, page 12, [0204], line 1-3) is processed with high acoustic quality (e.g. This is referring to the ROI set by the user) inputted together with the image data (see page 12, [0204], line 1-3) (e.g. It should be note that in the reference the audio data is appended with the image data. Further, the applicant regards the audio setting means as the ROI setting done for the image and since the audio is appended it is inherent that the audio data will be affected for specific region. The audio data is encoded by a MPEG4 encoder); an image encoding setting unit configured to set (see page 2, [0026], lines 3-4) for setting the encoding said image encoding unit to encode the image data (e.g. Specifying an ROI of the moving image as being set by the reference and has been known to be of higher quality) so that a partial region in each frame images included in the image data is encoded with a high image quality (see page 1, [0007], lines 1-3 and [0249])); and an audio encoding unit (see page 2, [0026], lines 3-4) configured to operate said second audio encoder operates to encode the audio data correspondingly to a time period during which said image encoder encodes, with the high quality, the partial region in each of the frame images in accordance with the setting by said image encoding setting unit encoding (see page 12, [0204], line 1-3) (e.g. It should be note that in the reference the audio data is appended with the image data. Further, the applicant regards the audio setting

means as the ROI setting done for the image and since the audio is appended it is inherent that the audio data will be affected for specific region. The audio data is encoded by a MPEG4 encoder), data integration unit configured (see Figure 24, multiplexer 2414) image encoding setting means (see Figure 24, mask encoder 2412 and [0202], ROI shape and position information) and the encoded audio data by said audio encoding means (see Figure 24, output of entropy encoder 2413 and input into multiplexer.) corresponding to the period of the frame images encoded with high image quality, and outputting the integrated data (see Figure 24, output of multiplexer 2414 and input into code output unit 2415.). However, Maeda does not specifically disclose the use of two separate encoders for encoding audio data using two separate methods and selectively outputting the encoded data and setting unit setting the operating of first and audio encoding unit said second audio unit.

Date et al. does teach the first audio encoding unit configured to encode the by an audio encoding method for encoding general audio data (see col. 6, lines 39-42, different compression method such as MIDI, for musical component); second audio encoding unit configured to encode the (see col. 6, lines 35-40, CELP) the audio data by another encoding method which is suitable for encoding speech data (see col. 6, lines 35-40, vocal components); operation of said first audio encoding unit and said second audio encoding unit so that (a) said first audio encoding unit operates to encode the audio data irrespectively of whether said image encoding setting unit effects the setting of encoding (see col. 6, lines data compressing section 8, performs data compression of the audio section regardless of setting unit), and (b) said second audio encoding unit

operates to encode the audio data correspondingly to a time period, with the high quality (see col. 6, lines 35-45, vocal components are encoded with higher quality), so that each of said first audio encoding unit and said second audio encoding unit encodes the audio data during the time period (see col. 6, lines 31-47, where the music and the vocal components are compressed using two different schemes for a time period of the signal). However, Date does not specifically teach the integration encoded audio data in a case image encoding setting unit does not effect the setting of the encoding, and to integrate with the encode image in a case where image setting unit effects the setting of the encoding thereby outputting integrated encoded data .

Ichimura does teach the integration encoded audio data in a case image encoding setting unit does not effect the setting of the encoding, and to integrate with the encode image in a case where image setting unit effects the setting of the encoding thereby outputting integrated encoded data (see col. 5, lines 32-45, image and audio data are stored with high quality for a given interval whereas the other intervals are processed as normal).

Hence, none of the cited references either alone or in combination thereof teach the series of steps and components as recited in claims 1 and 10. More specifically, the limitation of the combination of "in accordance with said image encoding setting unit setting the encoding to make the partial region in each of frame images the high image quality, such that (1) the audio data is encoded by said first audio encoding unit to provide audio encoded data irrespectively of whether said image encoding setting unit effects the setting of the encoding, *and (2) the audio data is encoded by each of said*



first audio encoding unit and said second audio encoding unit in a time period corresponding to the encoding set by said image encoding setting unit *so that one of the respective audio encoded data provided by said first audio encoding unit and said second audio encoding unit is selected* during the time period" and the data integration unit and step utilizing the two audio encoders when the setting unit is effected as recited in the following paragraph of independent claims 1 and 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishiyama et al. (US 6,741,649) is cited to disclose and picture and audio coding method and apparatus. Tatsumi (US 6,678,468 ) is cited to disclose and video and audio coding method and apparatus. Honjo (US 7,236,688) is cited to disclose re-coding of video and audio data with an optimum coding method. Mori et al. (US 2003/0012560) is cited to disclose sound and image coding that is performed based on parameters that are set.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARAS SHAH whose telephone number is (571)270-

Art Unit: 2626

1650. The examiner can normally be reached on MON.-THURS. 7:30a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571)272-7843843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/  
Supervisory Patent Examiner, Art Unit 2626

/Paras Shah/  
Examiner, Art Unit 2626

01/28/2010